OPERATION AND SERVICE MANUAL

MODEL 414

JUNIOR AC HYPOT®

SERIAL NUMBER 1362

ASSOCIATED RESEARCH, INC.
905 CARRIAGE PARK AVENUE
LAKE BLUFF, IL 60044 U.S.A.
PHONE 1 (708) 295-3312
FAX: 1 (708) 295-9165

FOR TECHNICAL ASSISTANCE
PHONE: 1 (800) 858-TEST

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OPERATORS MANUAL

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REPLACEMENT PARTS LIST

To order replacement parts, refer to the Replacement Parts List on the following pages. If you need assistance, call our Technical Support Hotline 1-800-858-TEST.

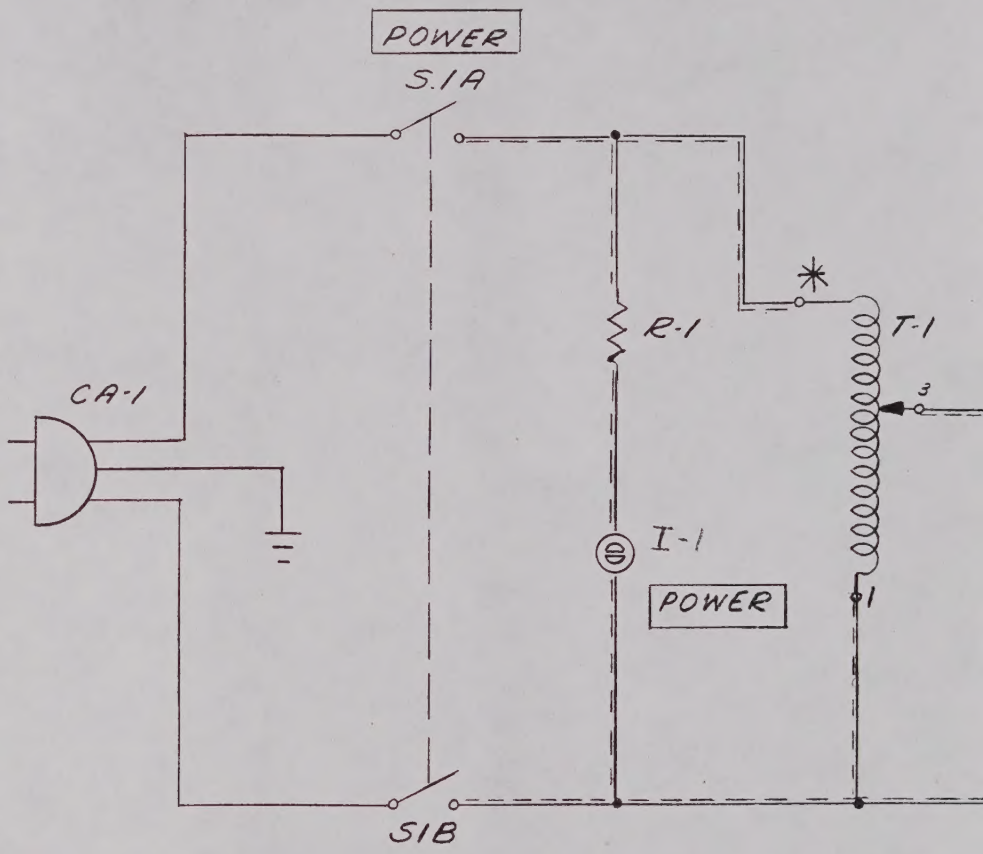
ASSOCIATED RESEARCH, INC.

MODEL 414 M1 - REPLACEMENT PARTS LIST

SYMBOL	PART NO.	DESCRIPTION
C-1	58168	Capacitor, High Voltage bakelite
CA-1	11649	Cable assembly, input w/plug 115V AC
CA-2	16296	Cable assembly, Return
CA-3	16295	Cable assembly, High Voltage
I-1	14159	Indicator assembly, red lens
I-2, 3	14160	Indicator assembly, clear lens
L-1	11155	Choke RF
M-1	32933	Meter, DC current 0-200 microamps
R-3	32001	Resistor, variable 250K 1/2W
R-1	57031	Resistor, fixed 100K 1/2W 10%
R-2	15260	Resistor, fixed 470 ohm, 1/2W 10%
R-4	11825	Resistor, fixed 10K
R-5	16208	Resistor, pot 1.5K
R-6	58672	Resistor, fixed 1Meg
R-7	10586	Resistor, fixed 4.99 Meg
R-8	14453	Resistor, fixed 1K, 1/2W 1%
R-9	14792	Resistor, fixed 220K
RT-1, 2	14503	Rectifier, silicon
S-1	55005	Switch, toggle DPST
T-1	11654	Transformer, variable - automatic
T-2	33249	Transformer, 6 KV

SCHEMATIC

USED ON
00411A
00414 M1
414 M1-M2
00411AA



20 GAGE WIRE

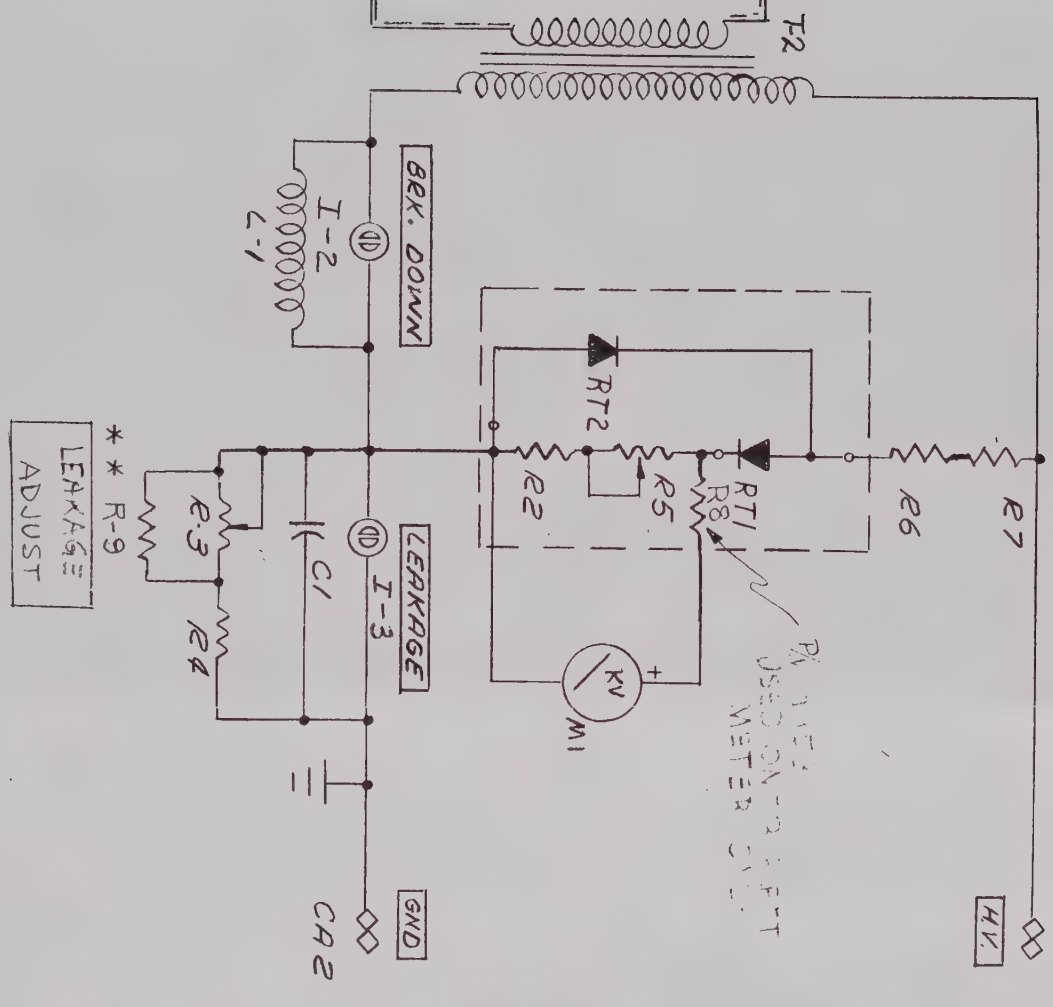
22 GAGE WIRE

* POWERSTAT TAP NO 2 FOR MODEL 411
" " NO 4 " " 414

** R-9 USED ONLY IN MODEL 414M1 STARTING WITH LEAKAGE SETTING .5 TO 5mA.

	SYMBOL	P/N	ASSEMBLY	SYMBOL	P/N	SYMBOL ASSEMBLY
MODEL 00411A	M-1	35584	00411A-02	I-1	14159	00404A-
	R 6	10024	00411A-02	I-2,3	14160	00404A-
	R,7	10?2-	00411A-02	S-1	55005	00404A-
	T.2	11385	00411A-02	CA-1	11649	00404A-
MODEL 00414A	M-1	35584	00414A-02	CA-2	00404A-05	00404A-
	R 6	10?81	00414A-02	CA-3	00404A-06	00404A-
	R 7	14-1+	00414A-02	T-1	11654	00404A
	T 2	11381	00414A-02	R-3	34120	00404A-

B-306027



SYMBOL	P/N	ASSEMBLY
R-5	16208	004018-04
RT1,2	14503	004048-04
R-2	15260	004049-04
R-1	14791	004044-04
R-4	16224	004074-04
R-8	14453	004 -04
C-1	53163	004 -04
L-1	1155	004044-04

358.

PA TEST USED ON -2 LEFT METER CKT.

INACTIVE

USED ON MODELS 411, 414, 414 M1-M2

LET.	CHANGE	DATE	BY	APP.
G	CHANGED R-4 AS PER E.C.O. 3588	6/10/81	EB	
F	ADDED SYMBOL IDENT.	1/19/81	EB	
E.	ADDED R-9 & NOTES FOR 414M1	5/25/78	DR-B	DB
D	ADDED MODEL 414 M1-M2	3/1[illegible]	[illegible]	
C.	ADDED R8 TO METER CIRCUIT	[illegible]	[illegible]	
B.	CHANGE D1 TO RT-1, D2 TO RT-2, AND NE-1, NE 2 NE 3 TO I-1, I-2, & I-3	6/4/75	J.S.	
A.	OUTDATED ORIGINAL ISSUE (A-1600)	3/20/75	MD	

SCHEMATIC WIRING DIAGRAM FOR JUNIOR AC HYPOTS

DWN. MD APP. RJ

CKD. RJ SHT. 1 OF 1

DRAWING NUMBER B-30627

ASSOCIATED RESEARCH, INC.
6125 W. Howard St.
Chicago, IL 60648

EnviroTech CONTROLS, INC.
An EnviroTech company

22001 Northpark Drive
Kingwood, Texas 77339-3804
Tel: 713/348-1000
Fax: 713/348-1283

May 3, 1994

Tektronix
Test & Measurement
Suite 101
2435 Kinwest Parkway
Irving, Texas 75063-3434

Ms. Brown:

Discussions with Associated Research have indicated that the current trip level on the following equipment should be adjusted to **1 mA.** @ 1200VAC instead of the previous agreed value of 2 mA. Please update your calibration procedures to reflect this recommendation.

Cost Center	Location	Make	Model	Serial #	Cal Cycle
7312	QC-W	ASSOCIATED RESEARCH	411	2672	182
4512	TRG-W	ASSOCIATED RESEARCH	414	1362	365
4512	TRG-W	ASSOCIATED RESEARCH	411AI	7111	365
6915	CAL-HA	ASSOCIATED RESEARCH	4040AT	2838	182

We have one instrument (Associated Research Model 414 Serial # 1362) that appears to not be calibrated to this level. I have instructed Michelle Marrs to return the unit to you for verification.

Sincerely,

Envirotech Controls

Richard E. Driscoll Jr.

R. E. Driscoll, Jr.
Quality Assurance Engineer

c: H. Hadi
M. Marrs

BAKER CAC · BJ SOFTWARE SYSTEMS · Houston Atlas · Westronics

MP MASTER
MA30082